EXECUTIVE SUMMARY

Background

Every airworthiness directive (AD) issued by the FAA contains a provision that states that an alternative method of compliance (AMOC) or adjustment of compliance time that provides an acceptable level of safety may be used if approved by the manager of the FAA office responsible for the AD. In recent years, several operators have expressed concerns about the number of AMOC approvals that must be obtained and the process for obtaining them. Because of these concerns, the FAA assigned the following task to the Aviation Rulemaking Advisory Committee (ARAC), and chartered the AMOC working group(WG) to: "Develop industry and FAA methods for improving the timeliness of approvals for alternative methods of compliance with [AD's], while maintaining at least the same level of safety." The WG was asked to develop recommendations to accomplish the following:

1. Improve the timeliness of AMOC issuance;
2. Maintain at least the same level of safety achieved under the existing process;
3. Reduce the need for AMOC while maintaining legal enforceability of AD's;
4. Standardize the process for issuing AMOCs throughout the FAA, and
5. Accomplish the foregoing in a cost effective manner for industry and without increasing the need for FAA resources.

In order to properly identify existing problems, at the outset the WG solicited data from affected operators and FAA offices regarding the number of AMOC requests submitted, the subjects of the requests, the timeliness of the FAA's responses, and the causes of any delays. Based on these data, the WG concluded that the vast majority of AMOC requests are for airframe-related AD's. Of these, most requested deviations from AD-mandated repairs or modifications, followed by extensions of compliance times and alternative inspection methods.

In reviewing these data the WG concluded that possible improvements could be made in four general areas: (1) the AMOC process; (2) delegation of AMOC approval authority to certain structural Designated Engineering Representatives (DER's); (3) improvements in service bulletins and AD's to reduce the need for AMOC's, and (4) AD's relating to certain Supplemental Structural Inspection Programs (SSIP).

Recommendations:

The AMOC team has identified the following recommendations, which if implemented would increase the efficiency of current processes and reduce the volume of AMOC requests through the ACO's.

The AMOC Process

1) ATA/manufacturers should develop guidance material for operators on AMOC processes. The document should emphasize the following points:

- The need for written processes within each operator's organization to ensure consistent timely initiation of AMOC requests.

- The necessary information that must be included in a request (A checklist is provided in Appendix 4) .

- The advantages of coordination of AMOC requests with the Type Certificate Holder for the affected product prior to contacting the ACO's.

2) FAA should revise the AD manual to require that future AD's:

- Allow forwarding of the AMOC requests to the ACO and the PMI concurrently. This requires a change in the current language of the AMOC paragraph in the AD's.

- Include the language for allowing certain AMOC approvals by TCH's structural DER's.

- Include the language for a note stating the acceptability of previously approved AMOC's in superseded and revised AD's.

- Include guidance regarding the transferability of AMOC approvals.

3) FAA should develop guidance material for PMI's highlighting their role in supporting the ACO's in approval of various types of requests.

Delegation

1) The FAA should implement a new policy to authorize certain TCH structural DERs to approve on individual airplanes alternative configurations for AD required repairs and modifications where the FAA determines that the intent of the AD was to restore the airplane into compliance with the airplane type certification basis or other defined airworthiness standard.

2) The FAA should issue a Notice for use by the ACO's to address the delegation issues identified by the team. This Notice would address numerous implementation issues and limitations arising from this recommendation (A draft Notice has been developed by the team and is included in Appendix 2).

3) Regarding temporary repairs of components that are subject of an AD, the FAA ACO's should use the guidance developed by the team to determine whether AMOC approvals can be delegated to the TCH structural DER's.

4) The FAA should develop guidance material for PMI's regarding their role in light of the new policy delegating the AMOC approvals to TCH DER's. The team has developed this proposed guidance material (Appendix 3).

Service Bulletin/Airworthiness Directive Improvements

1) ATA should provide a more detailed checklist for ATA's "lead airline" process as a means of improving the quality of service bulletins referenced in AD's. The objective of this checklist is to stimulate discussions between the lead airline contact and the TCH in reviewing the technical content of service bulletins. The need for fewer AMOC's should result.

2) ATA should define the limits of the lead airline process so that its role in reducing the number of AMOCs is clearly understood. In reviewing an airworthiness concern in which the industry takes an opposing view of the FAA on whether an AD is necessary, the "lead airline" process should nonetheless provide a quality service bulletin in the event the FAA adopts an AD.

3) ATA should revise ATA Specification 100 so that the scope of the approved AMOC for service bulletin revisions is more clearly understood.

Supplemental Structural Inspection Programs

1) For SSIP AD's that require approval of repairs by the manager of the responsible ACO, the FAA should delegate approval of SSIP PSE repairs to the TCH structural DER's.